APPENDIX 1

Subchapter M - International Traffic in Arms Regulation

UNITED STATES MUNITIONS LIST

(Articles designated as Arms, Ammunitions, Implements of War (22 **CFR** 121).) (A boldfaced bullet precedes certain articles that are deemed to be Significant Military Equipment **(SME)** as defined in appendix 2.)

CATEGORY I - FIREARMS

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- •A. Nonautomatic, semiautomatic and fully automatic firearms to caliber .50 inclusive, and all components and parts for such firearms.
- B. Rifle scopes manufactured to military specifications, and specifically designed or modified components therefor; firearm silencers and suppressors, including flash suppressors.
- •C. Insurgency- counterinsurgency type firearms or other weapons having a special military application (e.g., close assault weapons systems) regardless of caliber and all components and parts therefor.

CATEGORY II - ARTILLERY AND PROJECTORS

- A. Guns over caliber .50, howitzers, mortars, and recoilless rifles.
- B. Military flamethrowers and projectors.
- C. Components, parts, accessories and attachments for the articles in paragraphs A and B of this category. Including, but not limited to, mounts and carriages for these articles.

CATEGORY III - AMMUNITION

- •A. Ammunition for the arms in categories 1" and 11 of this section.
- B. Components, parts, accessories and attachments for articles in paragraph A of this category, including but not limited to cartridge cases, powder bags, bullets, jackets, cores, shells (excluding shotgun shells), projectiles, boosters, **fuzes** and components therefor, primers, and other detonating devices for **such-ammunition**.
 - C. Ammunition belting and linking machines.

● D. Ammunition manufacturing machines and ammunition loading machines (except **handloading** ones).

CATEGORY IV - LAUNCH VEHICLES, GUIDED MISSILES, BALLISTIC MISSILES, ROCKETS, TORPEDOES, BOMBS AND MINES

- A. Rockets (including, but not limited to, meteorological and other **sounding** rockets), bombs, grenades, torpedoes, depth charges, land and naval mines, as well as launchers for such defense articles, and demolition blocks and blasting caps.
- B. Launch vehicles and missile and antimissile systems including, but not limited to, guided, tactical and strategic missiles, launchers, and systems.
- C. Apparatus, devices and materials for the handling, control, activation, monitoring, detection, protection, discharge, or detonation of the articles in paragraphs A and B of this category.
- D. Missile and space vehicle power plants.
- E. Military explosive excavating devices.
- F. Ablative materials fabricated or **semifabricated** from advanced composites (e.g., silica, graphite, carbon, carbon/carbon, and boron filaments) for the articles in this category that are derived directly from or specifically developed or modified for defense articles.
- G. Nonnuclear warheads for rockets and guided missiles.
- H. All specifically designed or modified components, parts, accessories, attachments, and associated equipment for the articles in this category.

CATEGORY V - EXPLOSIVES, PROPELLANTS, AND INCENDIARY AGENTS

- A. Military explosives.
- B. Military fuel thickeners.
- C. Propellants for the articles in categories III and IV of this section.

- D. Military pyrotechnics, except pyrotechnic materials having dual military and commercial use.
- E. All compounds ~.pacifically formulated for the articles in this category.

CATEGORY VI - VESSELS OF WAR AND SPECIAL NAVAL EQUIPMENT

- A. Warships, amphibious warfare vessels, landing craft, mine warfare vessels, patrol vessels, auxiliary vessels and service craft, experimental types of naval ships and any vessels specifically designed or modified for military purposes.
 - B. Turrets and gun mounts, arresting gear, special weapons systems, protective systems, submarine storage batteries, catapults and other components, parts, attachments, and accessories specifically designed or modified for combatant vessels.
 - C. Mine sweeping equipment, components, parts, attachments and accessories specifically designed or modified therefor.
 - D. Harbor entrance detection devices, (magnetic, pressure, and acoustic) and controls and components therefor.
 - E. Naval nuclear propulsion plants, their land prototypes, and special facilities for their construction support and maintenance. This includes any machinery, device, component, or equipment specifically developed, designed or modified for use in such plants or facilities.

CATEGORY VII - TANKS AND MILITARY VEHICLES

- A. Military type armed or **armored** vehicles, military railway trains, and vehicles specifically designed or modified to accommodate mounting for arms **or** other specialized military equipment or fitted with such items.
- B. Military tanks, combat engineer **vehicles**, bridge launching vehicles, half-tracks and gun carriers.
- •C. Self-propelled guns and howitzers.
- D. Military trucks, trailers, hoists and skids specifically **designed**, modified or equipped to mount or carry weapons of categories 1, II, and IV or **for** carrying and handling the articles in paragraph A of categories III and IV.

- E. Military recovery vehicles.
- F. Amphibious vehicles.
- G. Engines specifically designed or modified for the vehicles in paragraphs A, B, C, and D of this category.

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H. All specifically designed or modified components, parts, accessories, attachments and associated equipment for the articles in this category, including, but not limited to, military bridging and deep water fording kits.

CATEGORY VIII - AIRCRAFT, SPACECRAFT, AND ASSOCIATED EQUIPMENT

- A. Aircraft, including, but not limited to, helicopters, nonexpansive balloons, drones, and **lighter**-than-air aircraft, which are specifically designed, modified, or equipped for military purposes. This includes, but is not limited to, the following military purposes: gunnery, bombing, rocket or missile launching, electronic and other surveillance, reconnaissance, refueling, aerial mapping, military liaison, cargo carrying or dropping, personnel dropping, airborne warning and control, and military training.
 - B. Spacecraft including:
- 1. Manned and unmanned, active and passive satellites (except those listed in category **VIIIB2**).
- 2. Nonmilitary communication satellites (excluding ground stations and associated equipment not enumerated elsewhere in appendix 1).
- C. Military aircraft engines, except reciprocating engines, and spacecraft engines specifically designed or modified for the aircraft and spacecraft in paragraphs A and B of this category.
- D. Cartridge-actuated devices utilized in emergency escapes of personnel and airborne equipment (including, but not limited to, airborne refueling equipment) specifically designed or modified for use with the aircraft, spacecraft and engines of the types in paragraphs A, B, and C of this category.
- E. Launching and recovery equipment for the articles in paragraphs A and B of this category, if the equipment is specifically designed or modified for military use or for use with spacecraft. Fixed **land**-based arresting gear is not included in this category.

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- F. Power supplies and energy sources specifically designed or modified for spacecraft.
- G. Inertial navigation systems and components designed specifically for such systems. Systems or components which are standard equipment in civil aircraft, including spare parts and spare units to be used exclusively for the maintenance of inertial navigation equipment incorporated in civil aircraft, and which are certified by the Federal Aviation Administration as being an integral part of such aircraft are subject to export regulation by the Office of Munitions Control only if the export is intended for a controlled country.
- H. Developmental aircraft and components thereof which have a significant military applicability, excluding such aircraft and components that have been certified by the Federal Aviation Administration and determined through the commodity jurisdiction procedure.
- .1. Ground effect machines (GEMS) specifically designed or modified for military use including, but not limited to, surface effect machines and other air cushion vehicles, and all components, parts, and accessories, attachments, and associated equipment specifically designed or modified for use with such machines.
- J. Components, parts, accessories, attachments, and associated equipment (including ground support equipment) specifically designed or modified for the articles in paragraphs A through I of this category, excluding aircraft tires and propellers used with reciprocating engines.

CATEGORY IX - MILITARY TRAINING EQUIP-MENT

- A. Military training equipment including, but not limited to, attack trainers, radar target trainers, radar target generators, gunnery training devices, antisubmarine warfare trainers, target equipment, armament training units, operational flight trainers, navigation trainers, and simulation devices related to defense articles.
- B. Components, parts, accessories, attachments, and associated equipment specifically designed or modified 'for-the articles in paragraph A of this category.

CATEGORY X - PROTECTIVE PERSONNEL EQUIPMENT

- A. Body armor specifically designed, modified or equipped for military use; articles, including but not limited to clothing, designed, modified or equipped to protect against or reduce detection by radar, infrared (IR) or other sensors; military helmets equipped with communications hardware, optical sights, **slewing** devices or mechanisms to protect against thermal flash or lasers, excluding standard military helmets.
- B. Partial pressure suits and liquid oxygen converters used in aircraft in category VIII, paragraph A.
- C. Protective apparel and equipment specifically designed or modified for use with the articles in paragraphs A through D in category XIV.
- D. Components, parts, accessories, attachments, and associated equipment specifically designed or modified for use with the articles in paragraphs A through C of this category.

CATEGORY XI - MILITARY AND SPACE ELECTRONICS

- A. Electronic equipment not included in category XII of the Munitions List which is assigned a military designation or is specifically designed, modified or configured for military application. This includes, but is not limited to, the following:
- 1. Underwater sound equipment, including, but not limited to, towed arrays, electronic beam forming sonar, target classification equipment, and spectrographic displays; search, acquisition, tracking, moving target indication and imaging radar systems; active and passive countermeasures and counter-countermeasures equipment; electronic fuses; identification systems; command, control and communications systems; and, regardless of designation, any experimental or developmental electronic equipment specifically designed or modified for military application, or for use with a military system.
- 2. Sonic depth finders; underwater **telephones**; **electro-mechanical** beam forming **sonars** and elementary **sonobuoys**; radios (including transceivers; weather, navigation, and air traffic control radar **systems**; navigation, guidance, object-locating equipment; displays; and telemetering equipment).

- 3. Armored coaxial cable capable of Radio Frequency (RF), optical, or high voltage power transmission.
 - B. Space electronics:
- 1. Electronic equipment specifically designed or modified for spacecraft and spaceflight.
- 2. Electronic equipment specifically designed or modified for use with nonmilitary communications satellites.
- C. Electronic systems or equipment specifically designed, modified, configured, used or intended for use in search, reconnaissance, collection, monitoring, direction-finding, display, analysis and production of information from the electromagnetic spectrum for intelligence or security purposes and electronic systems or equipment designed or modified to counteract such surveillance and monitoring.
- D. Very High Speed Integrated Circuit (VHSIC) semiconductor devices that are specifically designed for military applications and which have a high-speed signal and image processing capability with an operational parameter (gate-time-clock-frequency) or greater than 10" gates X hertz for an individual semiconductor device.
- E. Components, parts, accessories, attachments, and associated equipment specifically designed or modified for use or currently used with the equipment in paragraphs A through C of this category, except for such items as are in **normal** commercial use.

CATEGORY XII - FIRE CONTROL, RANGE FINDER, OPTICAL AND GUIDANCE AND CONTROL EQUIPMENT

- A. Fire control systems; gun and missile tracking and guidance systems; military infrared, image intensifier and other night sighting and night viewing equipment; military masers and lasers; gun laying equipment; range, position and height finders and spotting instruments; aiming devices (electronic, gyroscopic, optic, and acoustic); bomb sights, **bomb**ing computers, military television sighting and viewing units, inertial platforms, and periscopes for the articles of this section.
- •B. Inertial arid other weapons or space vehicle guidance and control systems; spacecraft guidance, control and stabilization systems; astro compasses; and star trackers.

C. Components, parts, accessories, attachments, and associated equipment specifically designed or modified for the articles in paragraphs A and B of this category, except for such items as are in normal commercial use.

CATEGORY XIII - AUXILIARY MILITARY EQUIPMENT

- A. Aerial cameras, space cameras, special purpose military cameras, and specialized processing equipment therefor; military photointerpretati on, stereoscopic plotting, and photogrammetry equipment, and components specifically designed or modified therefor.
- B. Speech scramblers, privacy devices, cryptographic devices and software (encoding and decoding), and components specifically designed or modified therefor, ancillary equipment, and protective apparatus specifically designed or modified for such devices, components and equipment.
- C. Self-contained diving and underwater breathing apparatus specifically designed or modified for a military purpose and components specifically designed or modified therefor.
- D. Armor plate and structural materials (including, but not limited to, plate, rolled and extruded shapes, bars and forgings, castings, welding consumables, carbon/carbon and metal matrix composites) specifically designed or modified for defense articles.
- E. Concealment and deception equipment, including but not limited to special paints, decoys, and simulators and components, parts and accessories specifically designed or modified **therefor**.
- F. Energy conversion devices for producing electrical energy from nuclear, thermal, or **solar** energy, or from chemical reaction which **are** specifically designed or modified for military application.
- G. Chemiluminescent compounds and solid state devices specifically designed or modified for military application.
- H. Devices embodying particle beam and electromagnetic pulse technology.
 - L Metal embrittling agents.



CATEGORY-XIV - TOXICOLOGICAL AGENTS AND EQUIPMENT AND RAD10LOGICAL **EQUIP-**MENT

- A. Chemical agents, including but not limited to lung irritants, vesicants, **lachrymators**, tear gases (except tear gas formulations containing 1 percent or less **CN** or **CS**), **sternutators** and irritant smoke, and nerve gases and incapacitating agents.
- B, Biological agents.
- C. Equipment for dissemination, detection, and identification of, and defense against, the articles in paragraphs A and B of this category.
- D. Nuclear radiation detection and measuring devices, manufactured to military specification.
- E. Components, parts, accessories, attachments, and associated equipment specifically designed or modified for the articles in paragraphs C and D of this category.

CATEGORY XV - (RESERVED)

CATEGORY XVI - NUCLEAR WEAPONS DESIGN AND TEST EQUIPMENT

- A. Any article, material, equipment, or device which is specifically designed or modified for use in the design, development, or fabrication of nuclear weapons or nuclear explosive devices. (See Department of Commerce Export Regulations, 15 CFR Part 378.)
- •**B.** Any article, material, equipment, or device which is specifically designed or modified for use in the devising, carrying out, or evaluating of nuclear weapons tests or any other nuclear explosions, except such items as are in commercial use for other purposes.

CATEGORY XVII - CLASSIFIED ARTICLES NOT OTHERWISE ENUMERATED

•All articles and technical data relating thereto which are classified in the interest of national

security and which are not otherwise enumerated in the U.S. Munitions List.

CATEGORY XVIII - TECHNICAL DATA

Technical data relating to the defense articles listed in the other categories of the U.S. Munitions List.

CATEGORY XIX - DEFENSE SERVICES

Defense services related to the defense articles **listed** in the other categories of the U.S. Munitions List.

CATEGORY XX - SUBMERSIBLE VESSELS, OCEANOGRAPHIC AND ASSOCIATED **EQUIP-**MENT

- A. Submersible vessels, manned and unmanned, designed or modified for **military** purposes or having independent capability to maneuver vertically or horizontally at depths below 1,000 feet or powered by nuclear propulsion plants.
- B. Submersible vessels, manned or unmanned, designed or modified in whole or in part from technology developed by or for the U.S. Armed Forces.
- C. Any of the articles in categories VI, IX, XI, XIII, and elsewhere in the appendix specifically designed or modified for use with submersible vessels, and oceanographic or associated equipment assigned a military designation.
- D. Equipment, components, parts, accessories, and attachments specifically designed or modified for any of the articles in paragraphs A and B of this category.

CATEGORY XXI - MISCELLANEOUS ARTICLES

Any article not specifically enumerated in the other categories of the U.S. Munitions List which has substantial military applicability and which has been specifically designed or modified for military purposes. The decision on whether any article maybe included in this category shall be made by the Director of the Office of Munitions Control.